

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011902**Date Inspected:** 29-Jan-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhao Chen Sun.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Heavy Dock(Tower Assembly), South Tower, Lift 1, Skin C, Bearing Stiffener(Inside Tower).

FCAW welding of Partial Penetration weld joint (PJP) SSD1-SA17F/G-21, 28; located on Heavy Dock(Tower Assembly), South Tower, Lift 1, Skin C. Welders are identified as 201825, 054069; ZPMC Quality Control Inspector (QC) is identified as Zhao Chen Sun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2333-TC-P4-F.

During the Quality Assurance (QA) random in-process visual inspection of South Tower Lift 1 Bearing Plate groove weld, this QA inspector observed AB/F NDT Personnel performing Magnetic Particle Testing(MT) for root pass. This is Partial joint Penetration Joint(PJP). Weld Identified as SSD1-SA17F/G-33.

AB/F QA found Linear Indication on the weld. The weld was previously tested & Accepted by ZPMC. The indication observed was inside the ZPMC NDT coverage area.

ZPMC grinded that Indication out & AB/F accepted the weld root pass after confirming it by MT. The attached photographs provide additional detail.

Heavy Dock(Tower Assembly), South Tower, Lift 1, Skin D, Bearing Stiffener(Inside Tower).

FCAW welding of Partial Penetration weld joint (PJP) SSD1-SA40B/E-13, 5; located on Heavy Dock(Tower

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Assembly), South Tower, Lift 1, Skin D. Welders are identified as 057244, 050041; ZPMC Quality Control Inspector (QC) is identified as Zhao Chen Sun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2333-TC-P4-F.

Heavy Dock(Tower Assembly), South Tower, Lift 1, Skin A, Bearing Stiffener(Inside Tower).

FCAW welding of Partial Penetration weld joint (PJP) SSD1-SA15D/F-1; located on Heavy Dock(Tower Assembly), South Tower, Lift 1, Skin A. Welders are identified as 040343; ZPMC Quality Control Inspector (QC) is identified as Zhao Chen Sun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2333-TC-P4-F.

Heavy Dock(Tower Assembly), East Tower, Lift 1, Skin E, Bearing Stiffener(Inside Tower).

FCAW welding of Partial Penetration weld joint (PJP) ESD1-SA16F/G-84; located on Heavy Dock(Tower Assembly), East Tower, Lift 1, Skin C. Welders are identified as 052075; ZPMC Quality Control Inspector (QC) is identified as Zhao Chen Sun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2333-TC-P4-F.

Heavy Dock(Tower Assembly), East Tower, Lift 1, Skin B, Bearing Stiffener(Inside Tower).

FCAW welding of Partial Penetration weld joint (PJP) ESD1-SA233-7; located on Heavy Dock(Tower Assembly), East Tower, Lift 1, Skin B. Welders are identified as 040736; ZPMC Quality Control Inspector (QC) is identified as Zhao Chen Sun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2333-TC-P4-F.

Heavy Dock(Tower Assembly), East Tower, Lift 1, Skin C, Bearing Stiffener(Inside Tower).

FCAW welding of Partial Penetration weld joint (PJP) ESD1-SA294F/G-7, 13, 19; located on Heavy Dock(Tower Assembly), East Tower, Lift 1, Skin C. Welders are identified as 058792, 046706, 042218; ZPMC Quality Control Inspector (QC) is identified as Zhao Chen Sun. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2333-TC-P4-F.

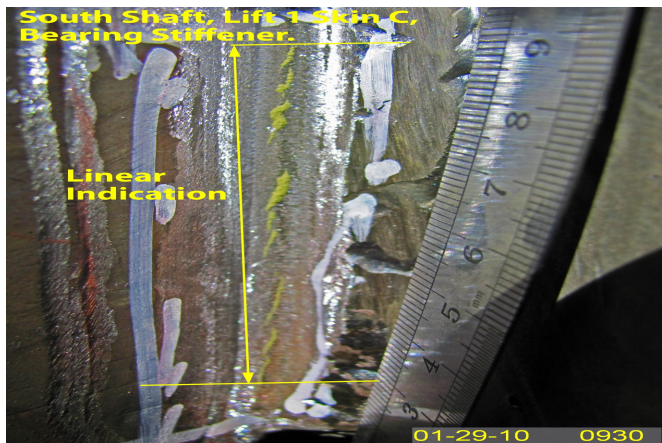
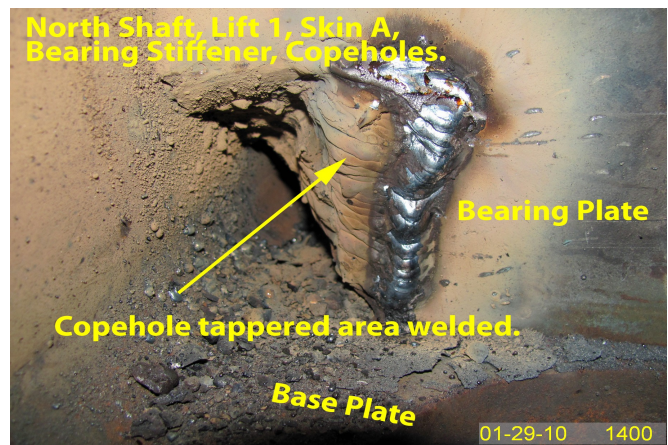
Heavy Dock(Tower Assembly), North Tower, Lift 1, Skin A, Bearing Stiffener Copeholes(Inside Tower).

During the Quality Assurance (QA) random in-process visual inspection of North Tower Lift 1 Bearing Stiffener Copeholes, this QA inspector observed welding has been done on the tapered portion of bearing plate at the location of copehole. The attached photographs provide additional detail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

No relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 13482570045, who represents the Office of Structural Materials for your project.



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<b>Inspected By:</b>	Juvekar,Amit	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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